

The chair of Management of Digital Food Businesses, in cooperation with OrgEnX is offering a

Project study

on the topic of

Data-Driven Customer Segmentation for an On-Site Composting and Heat Recovery System in the Food Service Industry

OrgEnX is an early-stage startup, part of TUM Venture Lab FAB, but located close to Stuttgart at the moment. We develop an on-site composting system with integrated heat recovery for the gastronomy and hospitality sector. Food waste (>50 kg/day) is shredded on-site and composted odor-free under optimal conditions (~60°C), reducing waste volume by 80–90%. The recovered heat can be used, for example, for space heating; for larger hospitality customers such as hotels, we are also developing a water-based heat unit that connects to existing emergency heating systems. As a small founding team, we are looking for support in better understanding which customer segments benefit most from our solution.

Scope of the project

Goal: Develop a data-driven model to identify and prioritize target customer segments in the food service and hospitality industry for OrgEnX's composting and heat recovery system.

Tasks:

- Identify relevant criteria characterizing food service operations (e.g., waste volumes, kitchen infrastructure, heating needs, building type, location)
- Develop a scoring/segmentation model evaluating potential customers along three dimensions: (1) compost output & local utilization potential (e.g., urban gardening, donation to restaurant guests), (2) heat demand & existing infrastructure, (3) economic viability thresholds (minimum waste volume/operation size for the system to pay off)
- Validate the model using available data sources (literature, public statistics, and/or interviews with gastronomy operators)
- Derive a prioritized ranking of target customer segments with recommendations for OrgEnX's sales strategy

Research questions:

- Which characteristics of food service operations best predict the economic and environmental benefit of an on-site composting/heat recovery system?
- How can target customers be systematically segmented and prioritized for sales outreach?

Requirements

- Interest in sustainability, food systems, and circular economy
- Basic knowledge of quantitative/data analysis methods (e.g., Excel; Python or R a plus)
- Willingness to conduct interviews/surveys with industry stakeholders
- Independent, structured way of working and good communication skills

Start and duration: As soon as possible, 3 months full-time / 6 months part-time

Language: English or German

Number of participants: 3 to 5

Supervisor TUM: Prof. Dr. Marjolein Buisman, Chair of Management of Digital Food Businesses

Supervisors OrgEnX: Christian Höttler, Kiara Jedele

Application

If you are interested, please send an email to OrgEnX kiara.jedele@orgenx.de to express your interest. The following information should be included in the email:

- A short CV
- A brief motivation statement (3–5 sentences) explaining your interest in the topic and any relevant skills or experience (e.g., data analysis, sustainability, market research)
- Your current semester and expected availability for the project period